

CLAIMS

1. A method for recovering data that was transported utilizing multiple data transport protocols, the method comprises the steps of:

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- a) receiving formatted data;
- b) decoding the formatted data in accordance with a second data transport protocol of the multiple data transport protocols to recapture first formatted data and first data transport identifying information; and
- c) decoding the first formatted data in accordance with a first data transport protocol or the multiple data transport protocols based on the first data transport identifying information to recover data.

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2. The method of claim 1, wherein the multiple data transport protocols include at least two of: slow speed universal serial bus (USB), an infrared transport protocol, fast speed USB, slow IR in accordance with an IrDA specified infrared data transport protocol, medium IR in accordance with the IrDA specified infrared data transport protocol, fast IR in accordance with the IrDA specified infrared data transport protocol, and amplitude shift keying (ASK).

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3. The method of claim 2, wherein the first data transport protocol is the slow IR, medium IR, or the fast IR in accordance the IrDA specified infrared data transport protocol and the second data transport protocol is the slow speed USB or the fast speed USB, and wherein step (b) further comprises decoding an IR frame delineation information as the data transport identifying information.

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4. The method of claim 3, wherein the IR frame delineation information includes an identifying header and IR frame length information.

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5. The method of claim 1 further comprises, prior to step (a), identifying the first and second data transport protocols based on connectivity information.
6. The method of claim 1, wherein step (c) further comprises altering a portion of the data when the portion of the data corresponds to reserved data.

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a processing module; and

5 memory operably coupled to the processing device, wherein the memory store
operational instructions that, when processed by the processing module, cause the
processing module to (a) receive formatted data; (b) decode the formatted data in
accordance with a second data transport protocol of the multiple data transport protocols
to recapture first formatted data and first data transport identifying information; and (c)
10 decode the first formatted data in accordance with a first data transport protocol or the
multiple data transport protocols based on the first data transport identifying information
to recover data.

8. The data communication device of claim 7, wherein the multiple data transport protocols include at least two of: slow speed universal serial bus (USB), an infrared transport protocol, fast speed USB, slow IR in accordance with an IrDA specified infrared data transport protocol, medium IR in accordance with the IrDA specified infrared data transport protocol, fast IR in accordance with the IrDA specified infrared data transport protocol, and amplitude shift keying (ASK).

9. The data communication device of claim 8, wherein the first data transport protocol is the slow IR, medium IR, or the fast IR in accordance the IrDA specified infrared data transport protocol and the second data transport protocol is the slow speed USB or the fast speed USB, and wherein the memory further comprises operational instructions that cause the processing module to decode IR frame delineation information as the data transport identifying information.

10. The data communication device of claim 9, wherein the IR frame delineation
30 information includes an identifying header and IR frame length information.

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12. The data communication device of claim 7, wherein the memory further comprises operational instructions that cause the processing module to alter a portion of the data when the portion of the data corresponds to reserved data.

5 first storage means for storing operational instructions that cause the processing module to receive formatted data;;

second storage means for storing operational instructions that cause the processing module to decode the formatted data in accordance with a second data transport protocol of the multiple data transport protocols to recapture first formatted data and first data transport identifying information; and;

third storage means for storing operational instructions that cause the processing module to (c) decode the first formatted data in accordance with a first data transport protocol or the multiple data transport protocols based on the first data transport identifying information to recover data.

14. The digital storage medium of claim 13, wherein the multiple data transport protocols include at least two of: slow speed universal serial bus (USB), an infrared transport protocol, fast speed USB, slow IR in accordance with an IrDA specified infrared data transport protocol, medium IR in accordance with the IrDA specified infrared data transport protocol, fast IR in accordance with the IrDA specified infrared data transport protocol, and amplitude shift keying (ASK).

15. The digital storage medium of claim 14, wherein the first data transport protocol is the slow IR, medium IR, or the fast IR in accordance the IrDA specified infrared data transport protocol and the second data transport protocol is the slow speed USB or the fast speed USB, and wherein the second storage means further comprises operational instructions that cause the processing module to decode IR frame delineation information (e.g., preamble, start and stop flags) as the data transport identifying information.

17. The digital storage medium of claim 13 further comprises storage means for storing operational instructions that cause the processing module to identify the first data transport protocol based on connectivity information prior to decoding the first formatted data.

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